## January 24, 2011

To: Commercial Building Energy Asset Rating and Labeling Team

From: Anthony J. Buonicore, P.E., BCEE, QEP

CEO, Buonicore Partners, LLC (Publisher, Building Energy Performance News

Chairman, ASTM Building Energy Performance Assessment Task Group

Subject: Comment on "An MPG Rating for Commercial Buildings: Establishing a

Building Energy Asset Labeling Program in Massachusetts" (December 2010)

The Massachusetts NGA and DOER team that prepared the December 2010 white paper, An MPG Rating for Commercial Buildings: Establishing a Building Energy Asset Labeling Program in Massachusetts, is to be commended for an excellent effort in developing an ambitious program directed at reducing building energy use. The following comments are provided for your consideration based upon three years of experience responding to commercial real estate stakeholder concerns about building labeling during the ASTM standard development process.

- (1) The intent to use both a building asset and operational rating theoretically makes sense. However, as noted in the report, the cost associated with a professional determining a commercial building's asset rating is considerable (much greater than \$15,000), and will not likely find much support in the commercial real estate industry, particularly if it is made a requirement in a transaction such as a sale, lease or financing. *In my opinion, if you want to include the asset rating, then most of the cost needs to be recoverable under acceptable incentives.* However, the operational rating makes much more sense for including as a requirement in a commercial real estate transaction. The cost is not prohibitive and the commercial real estate industry is already beginning to accept this as more and more city and state building energy use disclosure regulations become effective.
- (2) ASTM Standard E2797-11, Building Energy Performance Assessment for a Building Involved in a Real Estate Transaction, was published in January 2011 and is the culmination of almost three years worth of work by a Task Group of more than 200 professionals and stakeholders. This standard is solely focused on building energy use data, and will ensure that the process for its collection, compilation, analysis and reporting is consistent, transparent, practical and reasonable. It is strongly recommended that the methodology in E2797-11 be the basis for the way you require building energy use data to be collected as it is likely the commercial market will broadly embrace this methodology. ASTM E2797-11 does not address benchmarking specifically, other than to identify existing benchmarking and rating systems (such as Energy Star, LEED, Capital Markets Partnership and ASHRAE) and provide a complementary structure where it is expected that the "foundational" data collected according to ASTM E2797-11 methodology will be leveraged in these benchmarking and rating systems and thereby facilitate greatly needed data consistency in the process.

- (3) ASTM Standard E2797-11 also includes for the principal types of commercial property (office, retail, lodging, multifamily and industrial) an appendix of those characteristics that may significantly impact the building's energy use. *It is recommended that you consider these characteristics when deciding how benchmarking, i.e., building labeling, will be done.* There is too much at stake in the highly competitive commercial real estate industry to accept anything less than what is needed to provide truly good "comps" for building energy performance benchmarking. Anything less will simply not be taken seriously by the industry.
- (4) Reliance on EPA's Energy Star benchmarking database is questionable for Massachusetts due principally to lack of transparency. It is recommended that Massachusetts seriously consider developing in a statistically supportable manner its own comprehensive benchmarking database that covers the types of buildings to be included in the program. California did this to support its building energy performance disclosure regulation.
- (5) You indicate in the report that consensus does not exist nationally on the question of whether to use source energy (which EPA uses) or site energy as the basis for calculating an energy use index. While this statement may have been true at the time the white paper was prepared, it is not true today. ASTM Standard E2797-11 is a national, consensus-based standard. It was published by ASTM in January 2011 and uses site energy in its methodology. As such, your use of site energy is consistent with ASTM Standard E2797-11.
- (6) In view of the cost involved to prepare an asset rating, it is recommended that the minimum building size threshold for an asset rating be 50,000 square feet of gross floor area (as defined in ASTM E2797-11). Any building smaller than this will have a difficult time dealing with the costs to have the asset rating performed. On the other hand, operational ratings can be cost effectively applied with little difficulty to building sizes down to 10,000 square feet of gross floor area. To assist owners of smaller-sized buildings, you may want to consider providing incentives that are variable, i.e., they could be greater for smaller size buildings and less for larger size buildings.
- (7) If DOER is determined to include a building asset rating, then it makes considerable sense to adopt ASHRAE's Building EQ program. To have another building asset rating program will only add confusion in the industry.